

### **We claim**

1. The method for preparing self-assembled SiNTs by hydrothermal method, characterized in that: water is the solvent; the rate of silicon oxide and solvent is 0.01-10wt%; the silicon oxide and water are mixed and then put into the sealed reaction kettle; the preparation parameters are 200~500°C of temperature, 3~40MPa of pressure, and the temperature and pressure are maintained 1-5h with the equably stirring.

2. The method for preparing self-assembled SiNTs by hydrothermal method according to claim 1, characterized in that the stirring is performed using the magnetic stirrer.

3. The method for preparing self-assembled SiNTs by hydrothermal method according to claim 1, characterized in that the rate of silicon oxide and solvent is 0.05-8wt%.

4. The method for preparing self-assembled SiNTs by hydrothermal method according to claim 1, characterized in that the rate of silicon oxide and solvent is 0.1-6wt%.

5. The method for preparing self-assembled SiNTs by hydrothermal method according to one of claim 1 to 4, characterized in that the preparation parameters are 250~500°C of temperature, 8~35MPa of pressure and the temperature and pressure are maintained 1-4h with the equably stirring.

6. The method for preparing self-assembled SiNTs by hydrothermal method according to one of claim 1 to 4, characterized in that the preparation parameters are 300~450°C of temperature, 10~30MPa of pressure and the temperature and pressure are maintained 1-3h with the equably stirring.

7. The method for preparing self-assembled SiNTs by hydrothermal method according to one of claim 1 to 4, characterized in that the preparation parameters are 300~400°C of temperature, 6~10MPa of pressure and the temperature and pressure are maintained 2-4h with the equably stirring.